

COMPANY FOR MAINTENANCE AND MANUFACTURE OF TRANSFORMERS



# Aulona

L.I.c.



Gjakova, Kosovo



## ENERGETIC DISTRIBUTION TRANSFORMER (TEDA)

Energetic distributive transformer is a exclusive product of "Aulona" L.I.c. company from Gjakova, which guarantees great results in maximum duration, stability in work, minimal energy loss during work with or without charge, minimal noise which doesn't disturb surroundings where you work and also keeps away contamination. "Aulona" L.I.c. manufactures transformers with voltages of 10/0,4 kV, 10/0,42 kV, 20/10/0.4 kV, 20/0,42 kV all for power from 50 kVA to 1000 kVA.

Transformers are predicted for

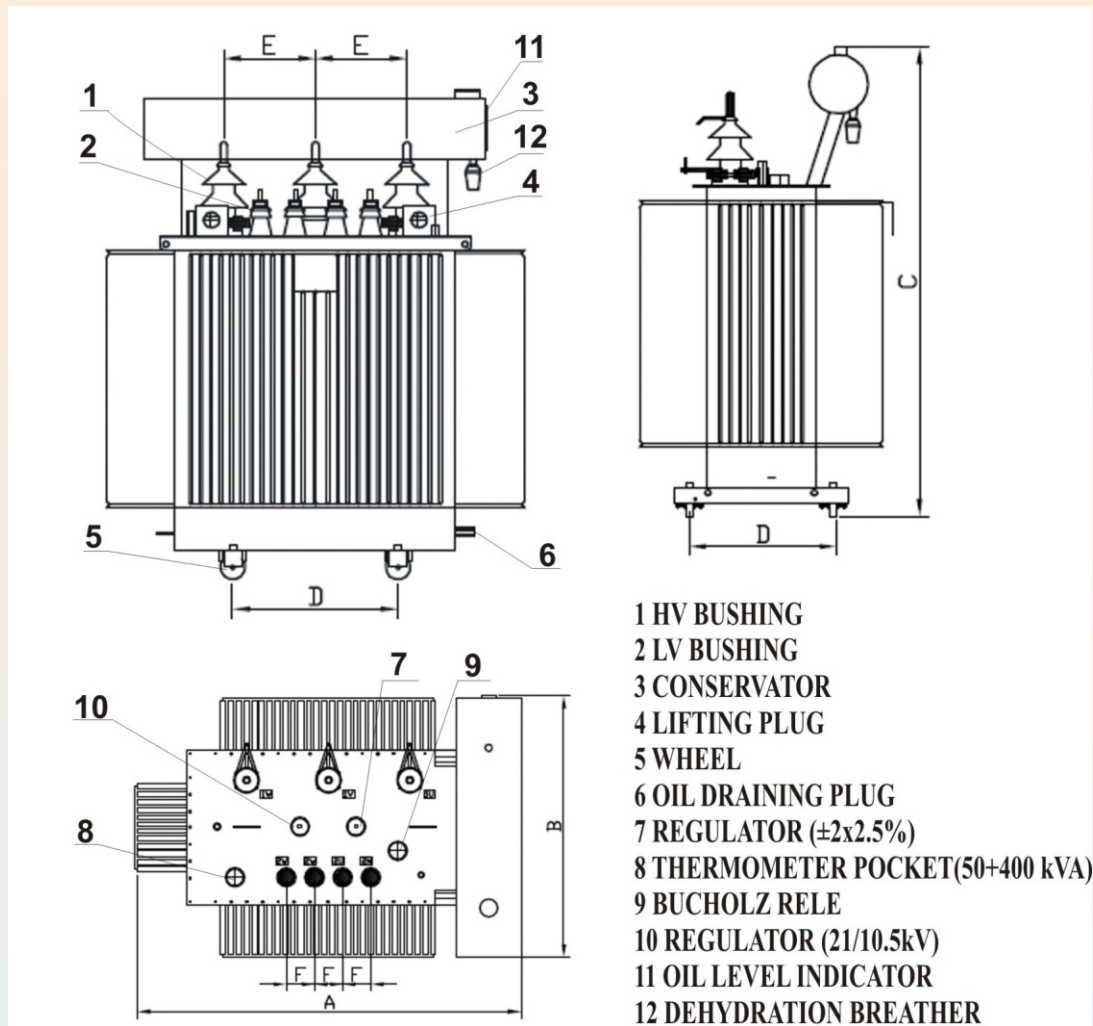
- Outer and inner assemble
- Refrigeration with transformer oil which doesn't contain PCB, for temperature near to 40 °C
- Longtime use in normal work conditions

TEDA can be produced with inner or outer conservator, and without conservator, which are produced and attested according to ISO 600076 standard. Based on customer demands it also can be produced in other standards. Insulators and refrigeration materials is mineral oil which accomplishes standard demands of IEC 60296 and doesn't contain PCB polluted materials for pollution of environment. TEDA is equipped with tension regulator ( $\pm 2 \times 2,5\%$ ) in HV part which is located on cover of transformer's tank. Reparation of which is done while transformer is out of function and without electric charge. TEDA is also equipped with tension regulator that can pass into two tensions 20/10/0,4 kV, operations which are done while transformer is out of function and without electric charge.



**AULONA TECHNICAL DATA THREE PHASE OIL IMMERSED TRANSFORMERS WITH CONSERVATOR ARE IN ACCORDANCE WITH IEC 60076 TIP TEDA**

Rated power	kVA	50	100	160	250	400	630	1000
Rated voltage	kV	20/ 10/ 0,4 kV						
Taping switch		2 x 2,5%						
Rated frequency	Hz	50 Hz						
Vector group		Yzn5	Yzn5	Yzn5	Dyn5	Dyn5	Dyn5	Dyn5
Impedensa	%	4	4	4	4	4	4	6
No load losses	W	150	250	360	520	740	1050	1330
Load losses at 75°C	W	850	1450	1850	2600	3650	5200	9000
Type of cooling		ONAN						
Oil weight	kg	135	180	235	310	390	525	680
Total weight	kg	560	720	820	1105	1490	2350	2985



**DIMENSIONS OF TEDA TRANSFORMER**

Height	C	1350	1420	1495	1670	1785	1940	2130
Length	A	940	985	1060	1130	1500	1600	2000
Width	B	620	630	650	685	730	750	1200
Distance between wheels	D	420	420	420	520	620	620	800
Distance between HV isolators	E	265	265	265	265	265	265	300
Distance between LV isolators	F	100	100	100	120	120	140	220

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Impedensa	%	4	4	4	4	4	4	6
No load losses	W	150	250	360	520	740	1050	1330
Load losses at 75°C	W	850	1450	1850	2600	3650	5200	9000
Type of cooling				ONAN				
Oil weight	kg	110	125	175	210	245	365	615
Total weight	kg	460	570	820	950	1260	1880	2760

**DIMENSIONS OF TEDA TRANSFORMER**

Height	C	1200	1295	1300	4120	1475	1600	1810
Width	B	530	540	660	640	750	910	1050
Length	A	900	1000	1150	1180	1400	1600	1840
Distance between wheels	D	420	420	520	520	620	620	800
Distance between HV isolators	E	265	200	200	200	200	200	300
Distance between LV isolators	F	100	100	100	120	120	140	220

**MANUFACTURE PROFILE**

**Magnetic core:** It is produced from high quality magnetic steel with minimal loss of energy. Sheets of magnetic steel are perfectly tied which enables work without noise and high quality of minimal losses in work with or without charge. Core is tied and cramped in that way that during transportation and use guarantees stability and no damage.

**Windings:** Are produced from round copper wire for HV and from profile copper or from aluminum foil for LV. Round copper wire is from class "F", whereas profile copper is isolated with transformer isolator paper. The core in whole between sheets is isolated with transformer isolated paper, super glue and isolated with propane isolator. Spaces between cores are isolated with hard propane isolator or plastic box produced especially for adequate types of transformers. All together after assemble get dried in oven for drying which enables total elimination of humidity. Oil filling of transformer is done through filtering and under pressuring machine which enables produced transformer to be under pressured. Spaces between windings sheets are done with canals which enable oil penetration for cooling which enable normal work for transformer in high temperature caused from work or atmosphere. Such isolation without gases is resistant at work pressure and atmospheric conditions.

**Isolators:** HV and LV connections are conducted through porcelain isolators are located on cover of transformer's tank which accomplishes demands of DIN 42530 and DIN 42531 standards. Assemblage and disassemble of those is done easy with no need of opening the tank. They are assembled and bolted in that way that they prevent oil outpouring for cooling also movement in any direction that could damage the transformer.

**Tank:** Is manufactured from corrugated steel, welded with CO2 welder. After transformer is closed, tank is filled with oil which penetrates in tank sides and till half of conservator. Transformer is projected in that way that during normal work in tank is formed pressure from 20 to 25 kPa.

Tank cover is locked up with bolts, sub sheets and nuts. Manufactured transformer with conservator enables normal work of it in working temperature conditions from -40 °C to +40 °C. Tank is isolated with anticorrosive color and painted with color which leak on tank whereas flattening is done with compressor and all these guarantee paint sheets of 60 microns. In the bottom of transformer are assembled wheels which enable movement of transformer in two directions.

## ORDERING DATA

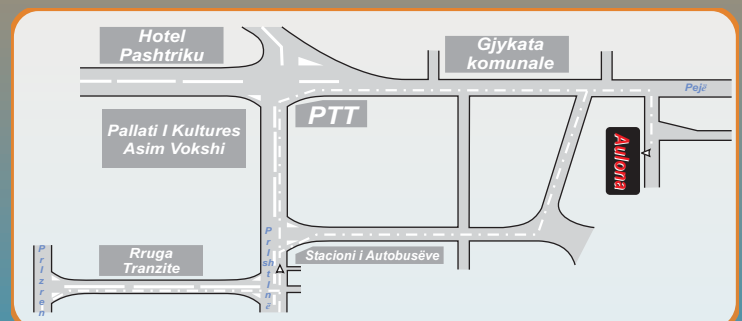
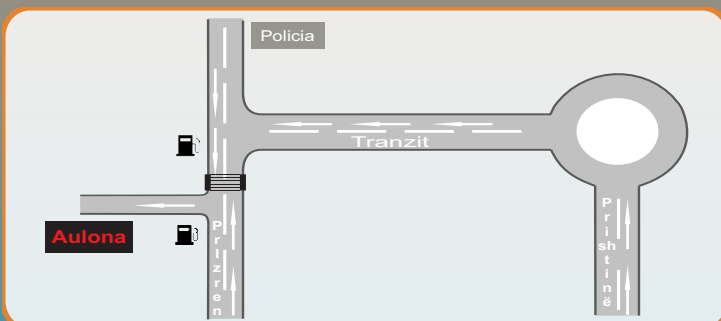
If you decide to purchase our product and want to furnish from us we suggest that your order should include demands which should define:

- Transformer type
- Rated power,
- Rated voltage,
- Vector group of connection,
- Losses in working with no charge
- Losses in working and currents with charge
- Followed equipments

For out of standard orders you have to mention:

- Frequency
- Tolerance in tension adjustment
- Highest temperature of environment

For serial connections you have to mention (power, vector group of connections, charge of short bracer and tolerance in tension adjustment with which transformers will work together.)



# 26 YEARS // 1989-2015

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